

STATUS

N E W S L E T T E R

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MEGA TOUCH

A product of Regent Marketing
A fingers-on review.

By Bob Womack for *STATUS*

One thing we'll probably all agree on, is the poor quality of the 130XE and ST computer keyboards. Other than the bubble-pad keyboards originally offered on the Atari 400, there has never been a worse input device created for a computer. The keys feel shoddy and really downgrade the overall "feel" of what are otherwise great tools. In fact, the feeling is somewhat akin to accidentally sticking one's fingertips into two-day old bubblegum on a park bench.

Well, someone's come out with a product that appeals to each and every one of us who has looked longingly at the keyboard of the old 800 or XL series computer we've relegated to collecting dust in the corner. Regent Marketing of Long Beach California now offers "Megatouch" keyboard stiffeners, a set of "specially engineered plated steel-alloy" springs. The ads for Megatouch say it "gets rid of the mushy feeling of your ST keyboard..." and the package says it will work with "Atari ST 520, 1040, XE 130, Macintosh, & PC Clones".

With the detailed instructions for installation of the product in hand, I got out my XE, gritted my teeth, and proceeded to pry away at the keycaps. After installing several stiffeners I decided to try a test peck. Hmmm... Musta done something wrong here. Pry, pry. Try again. No, this can't be right. It feels WORSE than before. Check the instructions and diagrams. Pry, Pry. Another try. Aaakkkk! Disaster! Instead of the mushy chewing-gum factory-standard feeling, I was left with a crunchy, gritty feeling. In order for some of the keys to make contact at all, I had to whack on them with my

fingers locked rigid. Some refused to make contact AT ALL. With others, I had to push through something that felt like a "gate", sort of like the old "positive-feel" buttons on the first hand-held calculators, before they would make belated contact. None of them felt as good as they felt from the factory. That's saying alot.

Now I really wanted this product to work, folks. I've spent hours typing away at this awful keyboard and would do just about anything to improve its tendency to slow me down by a third to a half my regular pokey speed. But I must tell you that I am typing this article on my 130 XE which has been restored to "stock" with none of the stiffeners installed. A letter from the company states, "...we have had an amazing 100% satisfaction rating from our happy customers." I wonder what the dissatisfied ones had to say?

But, I'll tell you the truth. I've never liked purely negative reviews. I've always thought it took more brains to come up with something positive to say about an inferior product. With that in mind, I can say this product DOES have a value to Atari community. If you ever need to pull a practical joke on a fellow Atarian, slip a few of these jewels under the caps of his keys on the sly and watch his face contort as he envisions paying to replace his trashed keyboard. Be kind and leave a text file to him, telling what you've done. Just be sure to leave enough keys working so he can read it!

Editors note: Thanks to Regent Marketing for providing STATUS a complimentary Mega Touch package for our review. Our reviewer removed the springs from his 130XE and returned them to me. We have since raffled them off and the new owner installed them in his 520ST and is quite satisfied.

MEGA POWER

By Buck Maddrey, *STATUS*

Having owned a 1040 ST for a couple of years, I had grown quite accustomed to the location of the off/on and reset switches on the rear of the keyboard. Inserting a disk into the right side drive mechanism also had become a matter of simplicity.

I recently updated my system to a Mega ST2. And thus began the whole process of getting familiar with a new system. The Mega STs consist of two major parts, the keyboard and the CPU. In my particular installation, because of insufficient desktop surface and depth, I was forced to place the CPU under the monitor which is located on a fixed shelf over the rear half of the desktop. The Mega's CPU is considerably larger than its sibling 1040. The off/on and reset switches are located on the rear of the CPU but on a different corner. I found them very difficult to reach and not very user friendly.

The location of these switches is a necessary inconvenience we must learn to live with. My guess is that it was physically impossible to route the necessary wiring from the rear power receptacle through the innards to the front for easy access by the user. In my case, I was almost forced to stand up in order to reach these switches.

The Fix

With the purchase of a few parts from a local Radio Shack, in about 15 minutes, I was able to relocate the off/on switch to a more convenient location.

Parts List:

- 1> Cord, PN 278-1257 \$4.95
- 2> Switch, PN 275-684 \$0.99
- 3> Box, PN 270-230 \$1.59

The cord is a standard electronics cord and the machine end matches that of the Mega. You may elect to use your original cord but after relocation it may not be long enough. Or, you may want to take your computer to a friends house and will need a spare cord to do so. I have since seen these power cords at shows for as little as \$1.00. The lighted rocker switch is rated at 15 Amps at 120 volts, more than enough for the Mega. The box is a small plastic project box with a metal cover secured with screws.

First I measured the distance to the remote location and cut the cord somewhere close to the center. I prepared the ends of the wires and installed slip on spade lugs. Next, I cut a round hole in one end of the box for the wire and an oblong hole in the other end for the switch. I installed a strain relief and pressed the wire into the hole. I secured the box to the desk with 2 small flat head screws from within the box. After slipping the switch into place and making the connections as per the package instructions, I attached the bottom cover. FINIS!

I leave the CPU switch on and power up/down with the remote switch. No more reaaaaaching around back fumbling for the switch, its up front, and its lighted. A simple solution to a problem that was 'stretching' my patience.

<<<<<+>>>>>

SPARTADOS "TOOLBOX"

By Bob Womack for *STATUS*

You've been tooling around with SpartaDOS for a bit now and have probably lusted away quietly in your heart for the SpartaDOS Toolkit, right? ICD provided all kinds of useful utilities in this neat package. Can't afford it quite yet?

Still wish you could have some of the utilities it offers? Don't give up yet!

Because ICD took their own sweet time coming up with the Toolkit, the public (domain) sector has come up with its own box of tools to take the place of those in the Toolkit. Some are even nicer than the ones in the Toolkit, though some run a tad slower or don't have all the features of the official versions. But at the right price (free), one can stand to loose some of the speed and sex-appeal of the official versions. Here's a guide to the programs you need to fill your own toolbox.

One of the handiest utilities in the official kit is SORTDIR.COM, a program which allows you to sort your disks directories by filename, extender, or date. DIRSORT.COM (cute, huh?) is the public-domain program which does much the same thing. It's really handy when you've got lots of files in a directory which are in no particular order and you need to get them organized. It's also useful when you assemble a disk to distribute to your friends and want to make the directory look spiffy.

Then there's the Toolkit's COMMAND.COM. This utility allows you to define Keyboard "macros" or "PF keys" consisting of frequently used command strings, which can be repeated at the touch of a couple of keys. If you don't have the budget for the Toolkit, you can always use SUPERKEY. Keith Ledbetter has left another legacy to the Atari community besides his Express telecommunications programs. SUPERKEY.ARC contains an excellent PF key system for the Atari. It is actually easier than the original for the novice to operate due to the handy key definition program Keith provided to create the data sets of your own PF keys. I use Shift/Control-1 for "DIR", Shift/Control-2 for "DIR D2:", etc., plus a few others like BASIC

ON and BASIC OFF. PF keys really cut down on the repetitive keystrokes in a heavy-duty DOS session.

The SpartaDOS 'Kit also has a disk editor (DISKRX.COM), with which you may repair trashed disks and probe the depths of the SpartaDOS disk format. Now, thanks to Bev Brown, you can have a full-featured disk editor too! SCANNER.ARC offers most of the features of DISKRX but is written in BASIC so you can get inside it and find out how it works. There are two versions available in the original package: One for Atari BASIC one for BASIC XE. On STATUS RBBS there's another version, RAMDSCAN.ARC, which overcomes the one limitation of the Atari BASIC version (speed), if you have a RAMdisk. By means of a STARTUP.BAT, this version establishes RAMdisk D3:, copys all the sub-files of Scanner into the RAMdisk, and RUNs Scanner from the RAMdisk.

Do you miss the menu structure of Atari DOS 2.0? You could use the Toolkit's MENU.COM, which alters SpartaDOS so that it prints a menu and initiates commands from single keys in a manner similar to that of Atari DOS 2.0. It's a neat learning tool and a help for those dyed-in-the-wool menu-DOS advocates. In the public sector, there are two excellent menu programs: MENU_X32.COM and SPARMENU.BAS. MENU_X32 is a binary menu program which offers an online help screen and single-key loading, running, or viewing of BASIC, binary, or text files. SPARMENU.BAS is a really fast and friendly menu which gives you many DOS functions, while allowing you to customize in BASIC to your own liking.

By the way, an extremely valuable utility NOT offered in the Toolkit but available at the nice price is VPATH.ARC. This little tiny

file modifies your SpartaDOS drive prompt to give you a verbose listing of the current path from the drive to the current subdirectory. As an example, a typical VPATH prompt within a hard drive's hierarchy of subdirectories might be "D3:PROGRAMS>GAMES>ARCADE>BINARY>", which would look like "D3:" without VPATH. This program is a great tool for those of us who must share our limited attention span between file maintenance and a five year old whose favorite utterances are "Why?" and "What are you doing there, Daddy?"

So don't cry if you can't afford the SpartaDOS Toolkit. It's nice, but you can have a similar toolbox, FREE!, and its all public domain.

<<<<+>>>>

"JUST BELONG"

FROM CACTIE

Central Arizona Chapter of The
Institute of Industrial Engineers

Are you an active member
the kind that would be missed?
or are you just contented
that your name is on the list?

Do you attend the meetings
and mingle with the flock?
or do you stay at home
to criticize and knock?.

Do you take an active part
to help the work along?
Or are you satisfied
to just belong?

Do you work on your committee
And get into the mix?
Or leave the work to just a few
and talk about the cliques?

Think it over,. member.....
You know right from wrong
Are you an active member
Or do you just belong?

<<<<+>>>>

Common Man

By John Barnes, WAACE

Downloaded from GENie

East Coast Atarians don't have to travel to Chicago, Atlanta, Las Vegas, or even Anaheim because they can get the straight scoop on the latest Atari doings right here in the "seat of government". AtariFest '89 is scheduled for October 7th and 8th at Fairfax HS. The event is sponsored by the Washington Area Atari Computer Enthusiasts and the Adult Education program of the Fairfax County Public Schools. Admission is free and the Fest is open to the public.

Since its humble beginnings in a hallway at Fairfax High School in the fall of 1985, the WAACE AtariFest has grown to become the premier East Coast event for Atari users. The 1988 Fest drew people from 26 states and a couple of foreign countries.

Something for Everyone

The fact that nearly 3000 people attended the 1988 Fest is a clear indication that WAACE is providing something people want. The WAACE member clubs, who cover the ground from Baltimore to Richmond, put a lot of effort into providing a varied and interesting experience. There is something for the inveterate shopper, the serious hacker, and the bewildered user interested in learning more about his ATARI.

Hardware and software from all over the ATARI computing world will be on display and, in most cases, on sale. Leading retail outlets and software developers will be represented. The educational side of the program will feature seminars, demonstration rooms, and a desktop publishing contest. Subjects covered will include desktop publishing, personal

finance, computer languages, telecommunications, games, graphic arts, and business uses. Music applications will occupy a special demonstration area of their own. A hardware and software swap meet will also be in operation.

Seminar speakers on Saturday and Sunday will present timely information on the latest products, trends, and problems.

A special feature for 1989 will be "The Best of Atari Desktop Publishing", a contest for anyone who feels that itch to be creative. Download file 10387 for a Publisher ST version of the Contest Rules.

Everyone gets a chance to unwind and mingle with our out of town guests Saturday night at a chinese banquet at the Hunan Lion restaurant in Fairfax. WAACE is recruiting an outstanding speaker and there will be special awards, including the prizes in the DTP contest.

Users Helping Users

WAACE is a confederation of user groups, people who are dedicated to the proposition that someone who has been there is in the best position to help someone else. These groups get front page billing at AtariFest with their disk libraries and membership campaigns.

Public domain software for Atari computers is a vital part of the mix and there are plenty of experts on hand to help you find your way.

Uninitiated members of the public who have never been in a user group are in abundance at the Fest and the groups can recruit very effectively. Anything that can inspire this much loyalty has to be worthwhile.

It's Your Fest

While the Fest doesn't cost the public anything it does cost the sponsors a lot of sweat and tears. It takes about 150 people to set up the space and tear it down again, to staff the demonstration rooms, to assist the vendors, to print the program, to register the visitors, to plan the banquet, to sell advertising, to generate publicity, the list goes on and on.

For the 1989 event the organizers will be canvassing over 300 vendors from all over the world. Additional vendor space has been arranged for, and a dressier look will pervade the whole Fest. Additional print advertising is being laid on to encourage attendance at the Fest. A bigger and better AtariFest means a bigger bill for labor. Somethinglike 20 percent of WAACE's total membership will have to help. People from other clubs and other areas are welcome wherever they can help. There are lots of opportunities in the seminars, the demonstration rooms, advertising sales, graphic arts production, you name it.

The only profit the organizers and their workers take home is a feeling of satisfaction in sharing the joys of Atari computing with the rest of the world.

Genie Folks who want more information on the Fest can send GE-Mail to J.D.BARNES.

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DO IT YOURSELF

Installing double sided drives for your ST: the inexpensive way
by Richard S. Stone,
STATUS

NOTE: Modifications will void your warranty and are done at your own risk. STATUS will not be liable for any damages or claims resulting there from.

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**Gregory T. Avant
LaVerne W. Avant**

This help file details ways to connect IBM DS 3.5" drives to the Atari ST. It has been tested and works well with Tandy (stock number 25-1061, with Teac mechanism), Chinon, Sony and Matsushita drives, and should work with any drive that has a Shugart interface (34 conductor data connection and 4 pin molex\mini molex power connection).

There are several ways to do this. If you have a 520STFM with an SS/DD installed, or an Atari external drive and power supply to gut for the case, power supply and connector board, the installation is a snap. If you have a case and power supply, such as the Tandy external drive, or an open slot in your hard disk case, the installation is a bit more involved.

First some background:

In the early days, Atari SF354's were specially made for Atari, and had a nonstandard 14 pin interface, and a lot of ingenious but unnecessary junk on the interface board. Later in production, Atari changed their ways, and began using the cheap IBM standard Shugart interfaced drives. The different types may be identified by the orientation of the connector plugs on the back of the drive casing. If they are upside down (ie, the groove on the interface plug is on the bottom), the drive uses Atari's 14 pin interface, otherwise, it uses a standard 34 pin Shugart interface. The Atari uses only 12 of the 34 lines of the Shugart interface standard. The important thing is that ANY Shugart interfaced drive will work with the Atari ST, and DS drives meant for IBM PC's are much cheaper than shelling out \$250 for an Atari SF314.

How you do it:

The next section contains 'modules' which detail the process for any type of drive, and you may simply skip over the information that does not apply to your

conversion.

Disassembling the SF type Atari drive:(If you are installing an IBM DS drive in an Atari SF case)

On the bottom of the Atari SF disk unit are eight screws in recesses. Four are located at the corners, four in a square near the front of the case. Remove the four screws at the corners, and carefully separate the halves of the drive case. Gently work the unit loose around the work light and the eject mechanism. Lifting the top cover about a half inch and then pulling forward to clear the eject button and drive light seems to work best. When you have the cover loose and ready to come off, you will have to reach inside near the back and gently disconnect the Molex power connector and the drive cable connector. Remove the top cover completely, then remove the interface board from its retaining slots. Remove the four screws in a square which hold the drive mechanism in place, and then put all eight screws someplace safe - we'll need them again

Modifying the interface board to use an IBM drive:(If your interface board has the 14 pin single row Atari connector)

No modifications are necessary if your interface board has the 34 pin Shugart type double row connector, except possibly removing the plastic tab from one side of the 34 pin connector, since it may need to be reversed to connect to the IBM drive (Atari does things backwards) - check the pin numbers on the drive's circuit board to see if you must do this.

This interface board is a bad remembrance of an older era - NONE of that circuitry is really necessary, but the two RF chokes on the power connectors are nice. You don't need to do anything to the power switch circuitry, just use a razor blade or hobby knife to cut the retaining clip off the 4 pin connector - it's upside down on the

Atari drives, and won't fit on the IBM drive with the clip there. Now comes the hard part - you must use a small screwdriver or hobby knife and cut ALL the solder traces on the board between the 14 pin drive plugs and the the solder pad where the 14 pin connector is attached. Next, use a small screwdriver to remove the #7 and #3 wires from the connector plug (this is your ground.), as it must be attached to a different row on the Shugart interface than the rest of the wires. Use a DC soldering iron to wire jumpers between all the terminals of the the 14 pin drive plugs to its proper number on the other drive plug, and the connector plug's solder pad (this will be about 28 jumpers). The exceptions are that you must solder pin 6 on the incoming drive plug to pin 5 on the outgoing drive plug if you intend to chain another drive through this one, and do not connect pin 5 on the outgoing drive plug to the connector plug's solder pad at all, again only if you intend to chain a drive on this one. This is necessary to bypass all the logic hardware Atari tacked onto the interface board to compensate for using the 14 pin connector. If you do not intend to chain other drives through this one (if you have an internal, or this will be the second drive of two externals) all you must do is solder the jumpers from the incoming drive plug to the appropriate number on the connector's solder pad. In this case, do not connect pin 5, and solder the jumper from pin 6 to #5 on the connector's solder pad. Test your work with a multimeter to insure that all the pins in the drive plug connect to the appropriate wire on the connector plug. Desolder wire #6, it is not used. If there is no wire for #8, solder #6 into the solder pad as wire #8. Next, use a screwdriver to remove all the wires from the connector plug (you must gently depress the small metal 'lock tab' and slide the wire/plug out of the assembly). Starting from the extreme left of the connector plug,

reinsert the wires/plugs in this order:

CONNECTOR PLUG HOLE

1- 2- 3- 4- 5- 6- 7- 8- 9-10-11-12-13-14
2- 1-14-13-12-11-10-9-8 - - 5-4 --
WIRE NUMBER

Wire #7 and/or #3 will connect to the other row on your Shugart connector. All odd numbered pins on the Shugart interface connect to ground. Your 14 pin connector will now plug onto the even numbered row of your drive's Shugart interface, check the circuit board on your drive to locate pin 34, then you can plug your connector starting one pin in (wire #2 should go on pin 32 of the drive's interface, the other wires are spaced to connect properly). (connect grounds, #3/#7 to any pin on top row)

SHUGART PINOUT

1.....Odd Nos..(TOP).....33
2.....Even Nos....(BOT).....34

The 14 pin connector plugs into the bottom row leaving pins 2,4, and 34 open.

S	2-vacant	A
H	4-vacant	T
U	6-14	A
G	8-13	R
A	10-12	I
R	12-11	
T	14-10	
	16-9	
	18-8	
	20-7	
	22-6	
	24-5	
	26-4	
	28-3	
	30-2	
	32-1	
	34-vacant	

Connecting the Atari interface board to your drive:(either a 34 pin interface or a 14 pin as modified above)

If you have a 14 pin connector, follow the diagram above. Check the circuit board to determine the proper connector orientation, and

plug the interface board's connector into the back of your drive, check the circuit board of both the interface board and the drive to determine the proper orientation of the 4 pin power connector, and plug it in as well. If you are not sure, plug the power supply into the interface board before connecting it and verify which pins are +5 and +12 volts, then connect them to the drive as indicated on the drive's circuit board - improper orientation of the power connector may damage your drive. Improper orientation of the data connector will not damage anything, it just won't work properly, and you will have to flip it 180 degrees and reconnect it. When you have the connectors plugged in and are satisfied with their orientation, connect the power supply and drive cable, and do a test boot with a blank, formatted disk inserted. If the system does not boot, recheck all your connections. If all is well, try a formatted double sided, and also do a save desktop and reboot, to insure that it reads/writes properly. Formatting from the desktop should give you approximately 720K.

Testing for proper media change operation:(the 'escape key' problem)

Some drive units (notably Chinon mechanisms) do not handle the media changed function (the drive knows if you have changed the disk in it) properly. Open a directory window for the drive, then change disks and hit the escape key. If the drive does not come on and update the directory window, you must install a jumper between pin #2 and pin #28 on the Shugart interface - this will correct the problem, and the drive will function exactly as it should.

Modifying the Atari SF type case for the IBM drive:(if you are mounting the new DS drive in your old SF case)

The new drive will not mate with the Atari style openings in the case's front. Test fit the drive in case by

lightly securing it to the plastic 'risers' with the four machine screws. If the bottom half's lip interferes with faceplate on the new drive unit, you will have to mark out the width of material to be removed, then cut off that part of the lip with a hobby knife or hobby saw. The new unit will fit flush, so no dust can get inside. Compare the face of the new unit to the holes present in the case's top half. Mark off where you will have to remove material to see the drive light, the eject button and the disk opening. Remove the material with a hobby knife or saw. Most likely this will leave a gap at the top of the drive which you must cover, either with black electrical tape from the inside of the case, or a cardboard or metal template which will seal off the front to prevent dust from entering the case. It's not quite as pretty as the Atari faceplate, but you can afford to be a little unaesthetic for the savings this modification offers.

Internal 520 STFM installation:

Remove the 7 screws from bottom of ST computer (square holes). Loosen but don't remove the screws in the round holes. Remove the top cover - lift on the left side first. Carefully lift the right side and remove the screws from the round holes securing the drive mechanism. Remove the guide flange on the top of the 34 pin connector using a knife or file. Flip the connector over and connect it up-side-down to the drive mechanism. Flip the 4 pin Molex connector up-side-down and connect it to the drive mechanism (the red wires on each connector should be toward the sides). Remove the spacers that supported the old drive mechanism, and replace them with plastic spacers that are about 1/4" shorter. The two spacers toward the back of the drive should be secured with short screws since the drive will just rest on them. The only screws that will hold the drive will be the two toward the front. It may be necessary to drill a hole if

all four holes are not provided on the ST. On the right side of the ST where the drive opening would normally be located are two plastic flanges. These are used to secure the front of the drive. The right half of these flanges will have to be trimmed off with a sharp knife to allow the drive mechanism to use them in the same way. Don't take any of the height off! Secure the drive with two screws and spacers so that the front of the drive fits over the two flanges. The drive should be level and as low as possible for the top cover to fit. Compare the new drive's faceplate to the opening already provided and determine where you will have to cut to allow access to the disk opening and the new eject button. Remove the material with a hobby knife or saw, and if necessary, seal any gaps from the inside with electrical tape or a cardboard or metal template. If you wish, you may also cut the leads to the drive light and connect them to the drive light in your top case half. Test your unit as outlined above, and if it works, you're done - replace the top cover and enjoy.

Modifying power supply plugs:(if you are mounting the unit in a hard drive case or other 'rail type' internal mounting)

The power connectors for standard IBM internal drive mounting is a wide, large pin 4 conductor molex type. You must purchase a 'mini molex' 4 pin connector, cut off the old connector, and connect the new one to the proper power leads. You may instead buy an adaptor which will connect to your wide pin molex and provide a mini molex lead to plug into your drive.

Modifying the Atari disk drive cable:(if you do not have an interface board, or will be mounting the drive in an external case and wish to directly solder the cable to the drive.)

I would suggest you purchase a

6' ST disk drive cable, and cut it in half, but simply cutting one end off a standard 3' ST disk cable will work as well. Strip back the outer insulation about 3 inches to give yourself room to work. Use a multimeter to determine which wires correspond to the pinouts on the plug, and solder them directly to the drive's circuit board at the proper pin numbers for the Shugart interface - they will be labeled on the circuit board. Consult your Atari ST owner's manual, p. 83 for the pin numbers, and solder them as shown here.

ST		Shugart
D	1—30	I
R	2—32	N
I	3—G	T
V	4—8	E
E	5—10	R
	6—Open	F
P	7—G	A
I	8—16	C
N	9—18	E
#	10—20	
	11—22	P
	12—24	I
	13—26	N
	14—28	#

NOTE:If you solder directly to the circuit board in this manner, this drive **MUST** be the second drive.

Connecting two drives with one cable:(if you are mounting two drives in an external case and have no Atari interface boards)

Obtain a short length of 34 conductor ribbon cable, with two female pin edge connectors on it. Connect the ribbon cable to the 34 pin connectors on both drives (be careful that the orientation is the same on each drive), and then modify and solder an ST disk drive cable to the drive which will be drive A, as described above.

Power supply requirements:(for external drives using no SF power supply)

You will need a power supply to mount in your case - be sure to allow room for it if you can. The drives need +5, +12 volts DC and independent grounds - this is a standard computer power supply

type. Allow ten to fifteen watts for each drive - they use 8W nominal, up to 13W peak. If your power supply is to be external to the drive case, get a switched power supply and some four conductor cable, and a 5 pin DIN socket (if you are using the Atari interface boards) or a 4 pin mini molex connector (for other installations). If your power supply is to be internal to the case, get a switched unit if you can, but any will do. And also buy a 4 pin mini molex connector if they are not provided on your power supply. Check the drive's circuit board to see which pins are the +5, +12 and grounds, and connect them appropriately. For internal power supplies, secure it firmly to the case, near the back, and you may have to cut a hole to gain access to the on/off switch.

Setting the drive select jumpers:

Your drive will, somewhere on the circuit board and probably near the data and power connectors, have a two rows of four pins each. They will be marked 0-4 or D0-D4, and will have a small plastic jumper tab inserted over two of the pins. If you are using Atari interface boards, set both of them to drive 0. Insert the jumper tab over both pins on the column marked 0 or D0. The Atari board handles the drive select for you. If you are chaining two drives with one disk drive cable and a ribbon cable as outlined above, set the first drive to 0 or D0, and the second drive to 1 or D1. It will also be necessary to connect the wire to pin #6 on the drive connector to pin #12 on the Shugart interface on your disk drive, instead of leaving it unconnected. Most drives come from the factory set as drive 0.

Finishing up:

When you have verified that the drive formats, reads/writes and detects media changes properly, you are finished, close up the case and enjoy your new double sided drive.

(for SF type drive cases)

Mount the drive unit on the four 'risers' provided, and screw it down with the four machine screws you removed earlier. Make sure that the connectors are properly and firmly in place, then put the cover on, and seat the interface board in its slots. Work the cover down onto its plastic guides, check to see that the case is not binding and your connectors are still in place, then screw the cover in with the four remaining screws.

(for other external floppy drive cases, such as Tandy's)

You will have to find some means to secure the interface board to the case. A good choice would be some cardboard for insulation, and machine screws through the two holes in the interface board to secure it to the bottom of the external case. After determining where you will mount the interface board, mark where you must cut the back of the case to allow access to the plug connections and the power switch. Use a hacksaw, tin snips or a sheet metal nibbler to make the holes, and file/sand them to prevent injuries when handling the drive case. If you soldered the drive cable directly to the drive, cut a hole for the cable, and use a grommet to prevent the edges from cutting into it. If it checks out, you should secure the board to the enclosure as best you can, hook it back up again after installing the unit.

Thanks for the escape key fix to a friend on Vanguard Datasystems BBS. The original TANDY.DOC file, some of which is contained herein is by: Davy Jones - GRASP, Richmond, VA.

Eds Note:

Due to the very technical nature of this article, you may wish to contact the author for further information:
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